

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEBRASKA**

**MARGARET SHERMAN, and  
RICHARD SHERMAN,**

**Plaintiffs,**

**v.**

**SUNSONG AMERICA, Inc., SHIU  
FUNG FIREWORKS, Co., LTD.,  
WINCO FIREWORKS, Inc., WINCO  
FIREWORKS INTERNATIONAL, LLC.,  
SHANGLI JIN XIN EXPORT  
FIREWORKS FACTORY, and  
WILLIAM LU,**

**Defendants.**

**CASE NO. 8:04CV300**

**MEMORANDUM  
AND ORDER**

This matter is before the Court on the Joint Motion in Limine (Filing No. 252),<sup>1</sup> to exclude the expert testimony of two of the Plaintiffs' expert witnesses, Dr. Kenneth Kosanke and Dr. Christine Wood. The parties have fully briefed the issues presented, and submitted indices of evidence to support their positions. An evidentiary hearing was not affirmatively requested.<sup>2</sup> Considering the proximity of the trial, I will rule on the admissibility of each expert's testimony independently. This Memorandum and Order addresses only Dr. Kosanke. For the reasons stated below, I will deny Winco and Shiu Fung's motion with regard to Dr. Kosanke.

***Daubert* Standard**

In light of *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), this Court must screen proffered expert

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<sup>1</sup>There are two other motions in limine at Filing Nos. 258 and 289.

<sup>2</sup>It is noted that the Plaintiffs ask this Court, in the event this Court has substantive concerns about the expert testimony, for the opportunity to participate in an evidentiary hearing.

testimony for relevance and reliability. *Blue Dane Simmental Corp. v. Am. Simmental Ass'n*, 178 F.3d 1035, 1040 (8th Cir. 1999). A reliable opinion must be based on scientific methodology rather than on subjective belief or unsupported speculation. See *Turner v. Iowa Fire Equip. Co.*, 229 F.3d 1202, 1208 (8th Cir. 2000). Furthermore, the expert's information or opinion must "assist" the trier of fact to understand or determine a fact in issue. Fed. R. Evid. 702.

In assessing reliability, the Court should consider factors including whether the proposed expert's theory, methodology, or technique: (1) can be and has been tested; (2) has been subjected to peer review; (3) has a known or potential rate of error; (4) is generally accepted by the relevant community; (5) ruled out alternative explanations; and (6) sufficiently connected the proposed testimony with the facts of the case. *Lauzon v. Senco Prod., Inc.*, 270 F.3d 681, 687 (8th Cir. 2001); *Jaurequi v. Carter Mfg. Co.*, 173 F.3d 1076, 1082 (8th Cir. 1999). This list of factors is not exclusive, and this Court is allowed "great flexibility" in its analysis. *Id.* The Supreme Court has held that *Daubert* applies to all expert testimony, not only scientific expert testimony. *Kumho Tire*, 526 U.S. at 141.

### **Facts**

Margaret Sherman and Richard Sherman (collectively referred to as the "Plaintiffs") have filed suit with this Court, originally bringing nine separate causes of action against, among other defendants, Shangli Jin Xin Export Fireworks Factory ("Shangli"); Winco Fireworks, Inc. and Winco Fireworks International, LLC (collectively referred to as "Winco"); and Shiu Fung Fireworks Co. Ltd. ("Shiu Fung"). (Filing No. 140).

On February 28, 2007, this Court ruled on the Defendants Winco and Shiu Fung's motion for summary judgment (Filing No. 204) and the Defendant Shangli's motion for summary judgment (Filing No. 223). Pursuant to the Court's Memorandum and Order (Filing No. 311), the four causes of action from the Plaintiffs' Second Amended Complaint that remain for trial are:

- (1) Negligent Failure to Use Reasonable Care to See that Goods are Safe for Intended Use;
- (2) Negligent Failure to Warn;
- (3) Breach of Implied Warranty of Merchantability; and
- (4) Loss of Consortium.

The Plaintiffs allege that on July 3, 2002, while they were watching a fireworks display in the backyard of Mrs. Sherman's daughter, one of the fireworks (the "Product") malfunctioned and flew directly into Mrs. Sherman's eye, causing permanent damage. (Filing No. 140).

### **Discussion**

Winco and Shiu Fung argue that Dr. Kosanke's opinions are unreliable under *Daubert* and Federal Rule of Evidence 702, based on insufficient facts and data, and will not assist the trier of fact. In this regard, Winco and Shiu Fung ask this Court to prohibit the Plaintiffs from offering into evidence the expert report of Dr. Kosanke, and to prohibit the Plaintiffs from introducing any statements, references, or inferences or asking any questions or presenting any evidence or information contained in his report.

Dr. Kosanke has an extensive curriculum vitae. Dr. Kosanke has received a B.S. in both chemistry and physics, with a minor in mathematics, from Wisconsin State

University; he has received his Ph.D. in physical chemistry from Michigan State University; and he has completed post-doctoral work in nuclear physics at Michigan State University. He is currently a professor at Mesa State College and is president and laboratory manager for PyroLabs, Inc. (which the Plaintiffs state is a forty-acre facility that provides laboratory, test, development, and consulting services for fireworks and other pyrotechnics issues). He is the author of over three-hundred articles and papers on pyrotechnics and explosives, appearing in various pyrotechnic and forensic science related journals, and over fifteen articles on chemistry and physics. (Filing No. 279, Ex. 1A; Filing No. 278, p. 4).

Dr. Kosanke's report contains the opinion that the Product was defective and unreasonably dangerous, and that the manufacturers, suppliers, and distributors failed to use reasonable care to see that the Product was safe for the use for which it was made and distributed. He opines that this is because the Product (i) lacked an effective guidance mechanism for the initial portion of its flight;<sup>3</sup> (ii) had an insufficient base-to-height ratio; (iii) had a sharply pointed nose cone; and (iv) had insufficient packaging to protect its fins from damage. (Filing No. 279, Ex. B).

Winco and Shiu Fung claim that Dr. Kosanke's opinions are unreliable pursuant to *Daubert* and Federal Rule of Evidence 702. Winco and Shiu Fung first argue that Dr. Kosanke has altered his opinions since reviewing the deposition testimony of Stan and Nate Kapustka, specifically the testimony that the Product flew upwards for one or two feet before changing direction and flying vertically, and that this change signals that he no longer claims that lack of an effective guidance rod is an issue in this case.

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<sup>3</sup>Dr. Kosanke states that this first issue was the most serious defect. (Filing No. 279, Ex. B p. 5).

However, as the Plaintiffs point out, Dr. Kosanke's opinion regarding the guidance rod is not inconsistent with Stan and Nate Kapustka's testimony, and there is no indication that Dr. Kosanke has fundamentally altered his opinions. Dr. Kosanke states in his report that the Product was most unstable during its initial, low-speed portion of its flight, and at this time was "most susceptible to becoming reoriented from its intended direction due to *relatively minor deviations in performance*." (Filing No. 279, Ex. B pp. 5–6 (emphasis added)). I find that Dr. Kosanke has not abandoned his opinion that a guidance rod was necessary.

Winco and Shiu Fung further argue that neither the Product, nor its twin (a similar firework purchased at the time the Product was purchased), was measured and tested. Rather, the Product was destroyed, only photographs of the twin were measured, and the only fireworks physically measured and tested were twenty-four "exemplar" fireworks purchased and supplied by the Plaintiffs years after the incident. Consequently, Winco and Shiu Fung argue that, due to the Saturn Missile's generic nature, there is no guarantee that the twin Saturn Missile was manufactured by the same company, let alone the twenty-four exemplar fireworks purchased for purposes of testing, and that Dr. Kosanke's testimony relating to an insufficient base-to-height ratio is unreliable. (Filing No. 253, pp. 10–11).

The Plaintiffs, on the other hand, direct this Court to *Bonner v. ISP Techs., Inc.*, 259 F.3d 924 (8th Cir. 2001). In that case, the Eighth Circuit Court of Appeals stated that "[a]s a general rule, the factual basis of an expert opinion goes to the credibility of the testimony, not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination. Only if the expert's opinion is so fundamentally unsupported that it can offer no assistance to the jury must such testimony be excluded." *Id.* at 929–30.

To support their position, the Plaintiffs argue that those fireworks measured and tested by Dr. Kosanke are nearly identical in appearance and contain the same product number as the Product. Further, the Plaintiffs claim that “the tested missiles share common characteristics with the identical twin Saturn Missile that was purchased at the same time as the Saturn Missile that injured Mrs. Sherman.” (Filing No. 278, p. 12). In this case, I find that Dr. Kosanke’s factual basis is not so fundamentally unsupported that it will offer no assistance to the jury. As in *Bonner*, it is up Winco and Shiu Fung to examine the factual basis for Dr. Kosanke’s testimony on cross-examination.

Winco and Shiu Fung also argue that opinions about the nose cone—that it was “made of a relatively hard material that is much more sharply pointed *than necessary* and thus creates an unnecessary danger to users and spectators” (Filing No. 254, Ex. 1 p. 7 (emphasis added))—is outside the realm of Dr. Kosanke’s expertise because he is not a forensic anatomist. They argue that any conclusions he draws about a blunter shape or softer material are based purely on common sense, and not technical or specialized knowledge. However, based on the Plaintiffs’ disclosure of Dr. Kosanke’s expert opinion, it appears to this Court that Dr. Kosanke is not offering an opinion as to the degree of damage that a softer or blunter nose cone would cause, but rather the *feasibility* of a softer or blunter nose cone. This is a technical and specialized conclusion about which Dr. Kosanke is qualified to testify.

Next, Winco and Shiu Fung argue that whether the Product was sufficiently packaged is no longer an issue in this case. They point to Dr. Kosanke’s deposition testimony, that they claim demonstrates that Dr. Kosanke does not believe that the sufficiency of the packaging is an issue. Dr. Kosanke stated that “I could clarify for you I

don't think that the – that a problem with the fins on this rocket is what caused it to produce the accident.” (Filing No. 254, Ex. 2, 39:22–24). Dr. Kosanke further stated that the defect in packaging he identified applies “only to the exemplars” provided by the Plaintiffs, not the Product or its twin, and was provided primarily for the purpose of identifying that whatever testing was done on those exemplars was not adequate to identify problems on those items. (Filing No. 254, Ex. 2, 45:4 to 46:25, 43:16–23).<sup>4</sup> However, Dr. Kosanke later stated that “once a missile is going fairly fast, it doesn't make a whole lot of difference what the fins are shaped like or oriented like because they're just there to provide drag . . . . But it's during the initial portions of flight before that drag force can be developed and keep the rocket going straight, going proper, relatively minor, as I said here, deviations in performance, you want to know what the deviation is in performance.” (Filing No. 254, Ex. 2, 48:16 to 49:2). It is premature for me to conclude that the Product's alleged deviation in performance was not due to fin damage; consequently, I will not rule that insufficient packaging is not an issue in this case.

Finally, Winco and Shiu Fung argue that Dr. Kosanke's new theory, after he “changed his opinion as to the Saturn Missile's inherent defect and the ultimate theory of causation,” (Filing No. 253, p. 19), is based on insufficient data, unreliable, and not recognized by the industry or by science. However, as described above, I do not find that Dr. Kosanke has so altered his opinion that his ultimate theory of causation has changed. He has stated that minor deviations in performance of a rocket or missile can cause course

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<sup>4</sup>Winco and Shiu Fung also state that the alleged inadequacies in the testing protocol are not relevant and unreliable. However, similar to the above opinions, Dr. Kosanke has sufficient expertise and education to conclude that the testing protocol was inadequate.

change, and he has substantial expertise in what may cause such a course change. Dr. Kosanke's opinions and theories were not developed specifically for this litigation, have appeared in scientific literature, and have had the opportunity to be peer reviewed.<sup>5</sup> He has reviewed the eyewitness testimony and used it to develop his own theories. The Plaintiffs have demonstrated that Dr. Kosanke has extensive and specialized experience, knowledge, and skill to testify about the issues presented in his expert report.

IT IS ORDERED: The Defendants Winco's and Shiu Fung's Joint Motion in Limine (Filing No. 252) is denied with respect to Dr. Kenneth Kosanke, and Winco and Shiu Fung are without prejudice to reassertion of their motion at the time of trial.

DATED this 2<sup>nd</sup> day of March, 2007.

BY THE COURT:

s/Laurie Smith Camp  
United States District Judge

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<sup>5</sup>As an example, the Plaintiffs have attached as Exhibit 1C an article co-written by Dr. Kosanke, appearing in a publication entitled *Fireworks Business* in 1997, in which he specifically opines "it is during the initial, low speed portion of a rocket's flight, that it is least stable and most susceptible to becoming reoriented from its intended direction. For that reason, external guidance such as a 'wooden trough or iron pipe at a 75° angle' is required. Thus, if the rocket quickly reaches at least a modest speed, the distance through which such guidance is necessary is reduced, and safety is enhanced." (Filing No. 279, Ex. 1C p. 3). Although the fireworks that are the subject of his analysis in that article are "Horse Brand" sky rockets, his underlying opinions and theories appear to be the same.